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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,477	10/01/2003	Young-sig Kwon	1293.1948	4673
21171	7590	08/22/2006	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			NGUYEN, THAN VINH	
			ART UNIT	PAPER NUMBER
			2187	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/674,477	Applicant(s) KWON, YOUNG-SIG	
	Examiner Than Nguyen	Art Unit 2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/24/05, 3/29/05.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-3, 8-10, 17, 20 and 21 is/are rejected.
 7) ☒ Claim(s) 4-7, 11-16, 18 and 19 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/24/05, 3/29/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Claims 1-21 are pending.
3. The IDSes, filed 1/24/05 and 3/29/05, have been considered.

Claim Rejections - 35 USC § 112

4. Claim 21 recites the limitation "the optical medium" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3,8-10,17,20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US 5,325,352) .

As to claim 1,8:

7. Matsumoto teaches a method of recording record signals sequentially transmitted from a host on an optical recording medium, comprising:

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receiving record data from the host and storing the data in a buffer if an environment data is set (store data in subcode memory; 6/27-45);

building information on the optical recording medium in a lead-in region (generated TOC; 1/40-47; 5/40-49);

signal-processing the record data in the buffer and recording the data on the lead-in region, a program region, and a lead-out region of the optical recording medium (record data on disk; 3/40-4/6; 5/23-6/49).

As to claim 2,9:

8. Matsumoto teaches notifying the host that the recording has been completed (complete recording status; 5/44; 9/23-30).

9.

As to claim 3,10:

10. Matsumoto teaches the information on the optical recording medium is built using subq value and subcodes (2/18-40,55-67; 5/50-65) but does not specifically teach using a 16 byte-subq value and a 96 byte-subcode. It would be clear to one of ordinary skills that the size of the subq and subcode varies upon different application requirements. Thus it would have been obvious to one ordinary skills in the art to use a 16 byte subq and a 96 byte subcode, or other sized subcodes, as necessary to fulfill the application requirement.

As to claim 17:

11. Matsumoto teaches a recording apparatus comprising:

a buffer section (subcode memory 44; 6/27-45);

a recording section (disc servo, motor; Fig 1);

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a table of contents building section using a subq value and a subcode value (generate TOC; 5/40-49, 7/54-5/15); and

a control section which manages the buffer section's capacity (6/28-45; 7/15-22; 8/60-65).

As to claim 20:

12. Matsumoto teaches a data recording method comprising:

processing a record command (5/66-67);

forming an appropriate recording power and recording speed (controlling power and velocity; 5/9-32);

initializing an encoder; (data forming circuit 32; 5/33-40)

receiving data from a host and managing a buffer (storing data into subcode memory 44; 5/55-57, 6/27-45);

setting an encoder mode and starting sector processing (process data; 6/50-68);

building information using a subq value and a subcode value (generate subcode; 5/50-6/4);

setting recording parameters and moving an optical pickup (controlling motors; 5/15-40);

recording the data from a lead-in region to a lead-out region (record data; 3/40-4/6, 5/23-6/49) ; and

notifying the host of completion (completion status; 5/44, 9/20-23).

As to claim 21:

13. Matsumoto teaches a data recording medium comprising:

processing a record command (5/66-67);

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forming an appropriate power and setting a recording speed (controlling power and velocity; 5/9-32);

initializing an encoder (initiate data forming circuit 32; 5/33-40);

setting a buffer to a raw recording mode (set reproduction mode; 8/48-65);

building table of contents information (building TOC; 5/40-49, 7/54-8/15); and

recording the received data on the optical medium (record data; 3/40-4/6, 5/23-6/49).

Allowable Subject Matter

14. Claims 4-7,11-16,18,19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. As to claim 4,11,18, the prior art does not further teach the building comprises: identifying the number of blocks if 16 byte-subq value exist; interpret a subq value for each block; and building the information on the optical recording medium using an index value in the subq value of the block (generating subq and subcodes; 2/18-40; 7/54-8/20).

16. Claims 5,6,13,14 are also allowable for incorporating the limitations of claim 4/11/18.

17. As to claim 7,12,19, the prior art does not further teach the building comprises: identifying the number of blocks if the 96 byte subcode value exists; deducing a subq value for each block; interpreting a subcode value of each block; and building the information on the optical recording medium using an index value in the interpreted subcode value of each block.

18. Claims 15,16 are also allowable for incorporating the limitations of claim 12.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Than Nguyen
Primary Examiner
Art Unit 2187